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EXAMINER
BOCCIO, VINCENT F

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/755,627	GEIER ET AL.
	Examiner	Art Unit	
	Vincent F. Boccio	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>Amend, Resp & RCE of 2/18/2009</u>.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>2-10,12-19,21-27 and 29-41</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>2-10,12-19,21-27 and 29-41</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2169.

Response to Arguments

1.   Applicant's arguments with respect to amended claims 2-10, 12-19, 21-27, 29-41 have been considered but are moot in view of the new ground(s) of rejection.

Comment On Amended Claims:

The examiner also makes comment about these claimed limitations, it is clear that a PC if the software is not part of the generic OS, conventionally not, any software to be added to the OS (e.g. driver, API), is the part of the software to interpret the data on the DVD, the basic OS normally cannot handle a DVD data structure where drivers needed are an extension, needed to Decode the data structure, since unknown or unique to most OS software.

In other words the claimed limitations wherein the OS examining addresses is read on OS control of reading addresses or controlling the DVD drive to read as understood.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

    (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
    This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time

any inventions covered therein were made absent any
evidence to the contrary. Applicant is advised of the
obligation under 37 CFR 1.56 to point out the inventor and
invention dates of each claim that was not commonly owned
at the time a later invention was made in order for the
examiner to consider the applicability of 35 U.S.C. 103(c)
and potential 35 U.S.C. 102(f) or (g) prior art under 35
U.S.C. 103(a).

2. Claims 2-10, 12-19, 21-27, 29-41 are rejected under 35
   U.S.C. 103(a) as being unpatentable over Kanazawa et al. (US
   6,580,870) and McDade et al. (US 5,889,515)

w/Supporting references defining the state of the art:

Bugnion et al. (US 6,496,847)

Olsen (US 6,802,022)

deCarmo (US 6,272,625)

The previous rejection with applied art shows various
teachings related to applicant's invention and will be
maintained, which teach various elements of the claims,
some limitations/teaches may be duplicated, but the
references show related teaches deemed relevant and
established during prosecution, thereby showing the status
of the prior art.

Regarding the amended claim language with respect to
claims 2-, 12, 21, 29, have been amended to further recite:

o   operating system (OS) examining the DVD data:
o   player software continues to operate
o   operating system Independently starting an
     Application program (e.g. Browser), which
     received a Resource Indication (e.g. URL).

McDade teaches in Fig. 1, a personal computer
with DVD Drive 106, having an OS in memory 102 & 120,
wherein the DVD Player Software is also clearly shown

> including a DVD extension program for handling another
> Job 124 Clock Software, in accord to:

col. 4, states

As previously stated, the DVD player 122 reads the audio-visual stream from
the DVD drive 106 and renders the audio-visual stream using the video display
subsystem 108 and the sound subsystem 110. *__The DVD player 122 operates as a
driver under control of the operating system 120 and utilizes the operating
system to access the DVD drive 106.__* As such, the DVD player 122 reads the
audio-visual stream by requesting the operating system 120 to open a file on
the DVD drive 106 that contains the audio-visual stream and by reading the
stream from the DVD drive using normal file system calls of the operating
system.

McDade teaches, DVD drive, DVD drivers or Software and Operating System
which controls or accesses the DVD.

It is well known for an Operating System to call or trigger a Browser, as is
obvious to those skilled in the art.

Kanazawa teaches cols. 19-

(152) While in the embodiments, the case where HTML contents are acquired
from an external server has been explained, a plurality of HTML contents may be
stored in a DVD media beforehand and the contents be displayed, interlocking
with the playback of the DVD video. **The function of a WWW browser _may be
incorporated in the DVD playback control program 116._**

Suggesting the obvious to those skilled in the art, wherein the OS can include
and handle the Browser, as is conventional, but, also that the Browser control can be
combined into a Playback Control Program, also deemed obvious to those skilled in
the art.

Therefore, it would have been obvious to those skilled in the art at the time of the
invention with Kanazawa in view of the various teaches provided, "Supra", with

McDade (teachings) and Kanazawa (suggestions), render obvious OS control of
Browser of Kanazawa, as is deemed to be optional and obvious detail as is deemed
taught and suggested to those skilled in the art, also the language wherein the player
software continues to operate is deemed inherent if not obvious, the previous position
rendered the Scanning Part of the Software to be triggered and go dormant, also that
programs can go dormant when not used (2nd Teaching), also that the OS examining
addresses reads on the teaching of McDade in view of controlling the DVD drive,

therefore, by controlling the reading of the DVD data, as is also obvious and deemed
obvious to those in the art.

    Regarding claims 2-6, Kanazawa discloses and meets the
recited limitations associated with a method and
corresponding apparatus the method comprising the steps of:

-     in an operating system (Fig. 17, "Multi-media Desk
  Top PC & DVD drive 111 and col. 10, lines 25-40, "NT
  sources and NT resources",

-     checking a DVD for resource indications in address
  regions associated with the resource indications,
  met by detecting URLs in the read DVD data from the
  DVD read out DATA, which are located in NAV packs
  for URL addresses or regions having addresses,
  storing URLs or not (col. 16, EXIST OR NOT);

-     while, playing the DVD IF a resource indication
  (ICON), user selection then, is present and the OS
  of the PC, AS TRIGGERRED BY THE USER TO, examines
  addresses of requested DVD data,

-     when requested to check (user initiated WEB button
  selection), otherwise checking is dormant, until
  user selection of an ICON, then checking commences;

-     IF a match (met by Fig. 24D, col. 19, lines 11-25,
  "address at which the URL is written is specified in
  the operand of the "jump URL"), associated with the
  addresses associated with the resource indications;
  if a match is found (address location & URL exist),
  in the operating system starting an application
  program (see Browser) and providing the resource
  indication (URL to browser) having the matching
  associated address (Nav_pck and URL has a address
  and may have a URL), to the application program to
  obtain a resource (Browser to obtain WEB page).

Met by col. 16,

o WEB button pressed, start scanning DVD data of the
   DVD for a URL;

o the checking, Acquires a navigation pack having an
   associated address (address of NV_PCK),

o ***IF or otherwise, when the indication is not present
   upon checking the DVD, laying dormant from further
   checking (met by scanning completed and NO URL,
   checking is halted till, the user clicks another
   ICON, or waiting for another user trigger to check
   procedure again, after clicking an ICON);***

o URL present (match met by YES URL exists and no met
   by no URL, in NAV_PCK data which was read from an
   address),

o IF, URL not exist, playback continued and

o IF, URL exists (checking halted), and a pause of
   reproduction, store position and state of the DVD
   video presently being reproduced and trigger browser
   to retrieve the URL related data (web page/Internet-
   HTML, WWW), col. 16;

o from a text portion of the DVD (text areas holding
   text meets the limitation of embedded information
   accessible from a text portion of the DVD), wherein
   Drivers corresponding to a Media/DVD which does not
   handle URLs would IGNORE the additional data, in
   view of no knowledge no access, the drivers are
   required to be programmed to handle any data on the
   DVD, therefore, data not know to the software will
   be ignored inherently, based on no knowledge of the
   data in any area of the media.

col. 16-, Kanazawa

(102) First, a method of giving a URL to a video object complying with the
DVD video standard and a reproducing method in connection with the method will
be explained.

(103) As explained in FIG. 18, in the DVD video standard, a video object is
composed of a file group for video objects (or video data), management
information on the data, and a control information file group for describing
the playback sequence. The video object is an MPEG-2 program stream and has
PCI and DSI, video data management information, as a sub-stream. A navigation
pack including these is called a video object unit, which never fails to exist
at the head of one GOP or two GOPs (0.5 sec to 1 sec) of video data.
**Therefore, embedding a URL in the reserve area for the PCI or DSI makes it
possible to specify the Internet address to which the stream is related during
the playback.**

(106) Specifically, *when the button is pressed*, *the DVD playback control
program 116 acquires a navigation pack (NV_PCK) in the video object unit
presently being reproduced (step S101). Then, the DVD playback control
program 116 judges whether an Internet address (URL) is present in the NV_PCK
(step S102). If there is no Internet address, the playback is continued (step
S103).*

              Applicant's specification for clarity

       Pages 2-3 of applicant's specification:

       "In a preferred embodiment, the embedded information is
supported by the operating system, preferable **an extension of
the operating system.**

       "Having the operation of the system of the present
invention independent of the control of a DVD player software is
advantageous. One way to support embedded information for DVD is
to have the DVD player software modified to support such
embedded information. **The problem with modifying the DVD player
software is that it requires such DVDs with embedded information
to be used only with the DVD player software systems that
support embedded information.** Thus the embedded-link system
would not work with all of the DVD player software that, support
the DVD specification. By using operating system software, in
particular operating system extension software, this problem is
avoided. The system of the present invention can be used with a

variety of different DVD player software systems without
requiring any modification to the DVD player software.

      Page 4 of applicant's specification:

      "The operating system extension 32 can be for example, a
dynamic loaded library, driver or other unit. The operating
system extension 32 examines the DVD data sector address for
sectors associated with resource indications."

      Therefore, the recited limitation,

"… the starting and providing steps are not done under the
control of DVD player software.", is met by the OS with
extension, to handle extraction of the URLs and providing the
URL to the browser, through the OS with extension and browser
software installed to the OS.

      Therefore, in accord to Kanazawa col. 2 and col. 10, the
programs are loaded into RAM from the DVD or another storage
(such as a medium with the programs), col. 11, the programs are
software programs playback control composed of driver groups.

      In light of applicant's specification, using an operating
system with some sort of extension is deemed met by Kanazawa.

      In an alterative rejection 103 rejection, if it is deemed
that Kanazawa fails to clearly show or describe the programs as
a clear extension of the OS.

      To add clarity to the rejection the examiner cites Bugnion,
which teaches and recites, at col. 15, lines 25-34,

      "The legacy virtual machine monitors from Microsoft are
integrated as part of Windows95 and Windows NT. The
implementation according to the invention is portable, requires
only a simple extension (the driver 390) of the operating system
(which can even be uninstalled when unused) and supports a full
VMM", as taught by Bugnion."

      As recited in claims 2-3, reads on an operating system such
as NT windows is loaded with programs from the DVD, such as
drivers, being an extension of the OS, can be uninstalled when
unused, but, supports all VMM which was integrated vs. an

extension, which allows for uninstalling when unused, as taught
by Bugnion.

     Therefore, it would have been obvious to those skilled in
the art at the time of the invention to modify Kanazawa by
loading the program into the NT resource or an OS, as an
extension, rather than a fully integrated program, as taught by
Bugnion, having advantages of uninstalling when unused, which as
those skilled in the art understand, uninstalling remove the
driver or extension from the current RAM computer memory,
thereby not using memory when not needed, reserving available
memory for other concurrent applications, as is obvious to those
skilled in the art.

     Regarding claims 7-8, Kanazawa further meets the limitation
of wherein the indication of the address region is a DVD menu or
video indication (Fig.19 A, "WEB/WEB Link Button", or a video
button or a menu to select from), from which the address region
is determined (upon selecting the Button the address first is
determined to exist, thereafter locates the HTML content, thru
the browser based on the address and the region is determined,
Based on the user selecting the button, or "user input
detection" of the region of the Button on the screen, which has
a region/location, on the screen);

O   wherein the resource indication (Button), is a file
indication (or an indication of possible URL leading to the
corresponding HTML content itself through a browser).

     Regarding claim 9, Kanazawa is deemed to further meets the
limitation of: wherein the operating system produced a buffer
(buffered DVD data to memory 12 in Fig. 17), of addresses
(addresses over time, therefore, multiple), requested from the
DVD player hardware (Fig. 16, "HARDWARE BLOCK", having 111, 112,
113, 114, 100), wherein thru the software in memory (col. 10,
lines 27-35, in a RAM 2 or embodiment of Fig. 17, "RAM"),
wherein the operating system examines the buffered data from the
DVD for addresses corresponding to a resource indication
(Fig. 17, CPU & software, with respect to Fig. 16, "SOFTWARE
Block" having 201, 202, 117, 116), also see col. 17, line 49 to
col. 18, line 36.

     Regarding claim 10, Kanazawa is deemed to disclose all as
  recited, but, fails to disclose wherein the addresses are

sectors, having data from the DVD stored in the buffer, over
time, but fails to disclose a sectored format of the DVD.
   The examiner takes official notice that the referring to a
data structure of a disk having sectors is well known and
obvious way to utilize sector-zed, data structure, therefore
it would have been obvious to one skilled in the art at the
time of the invention to modify Kanazawa by utilizing a
sector-zed data structure and locating data accessed through
sector addresses as a means to address the data on the DVD, as
is well known and conventional in the art, as section dividers
or sectored disk structure, on a disk or DVD, medium, is
obvious and conventional data structure to conform to, as is
obvious to those skilled in the art.

   It is noted that Bugnion, teaches at col. 16, lines 26-35:
   "The device emulator 300 then uses the API 392 offered by
the HOS 340 to emulate the I/O requests, that is, to read or
write the disk SECTORS from the corresponding virtual disks
38. The call to the API is shown as path D, which call is
passed in the conventional manner (path E) to the appropriate
device driver 382 within the HOS 340 …"

   Bugnion teaches a disk having sectors being known in the
art, supporting the official notice taken as being convention
and well known.

   Regarding claim 12-19, 21-27, 29-37, claims 12-, system
claims, claims 21-, computer program, claims 29-, apparatus, are
deemed analyzed and discussed with respect to the claims above.

   Regarding claims 38-41,"wherein the resource indications
and the associated sector address regions are stored on the DVD
disc in a manner that **_they are ignored by systems that do not_**
support embedded information."

   To address this limitation the examiner first cites Kanazawa,
   which states col. 2, lines 1-7,

   "a system which enables DVD video titles to be combined
with the Internet by an effective use and simple expansion of
the DVD standard **_without changing the standard_** by which realizes
a new service where DVD video titles are combined with hyperlink
contents, such as HTML files, provided on the Internet."

The examiner additionally cites applicant disclosure, page 3, which states,

"In one embodiment, the resource indications and associated sector address regions are stored in an vendor specific field of a text portion of the file. ***Other players will not access this vendor specific field***."

And, lastly the examiner cites Olson, which teaches at col. 5, lines 30-49, which states,

"Typically the operating system 26 will load device drivers 28 to permit access to various peripheral devices. Referring again to Fig. 3, in one embodiment of the present invention the operating system 26 loads **a device driver 28** *that is aware* **of the second memory region 42 and is able to access its contents**."

Therefore, there exist a region having data which without a driver that is aware of the existence thereof, will effectively not use, not access or would ignore the region, in view of no knowledge of its existence.

Kanazawa stated that providing resource indications of the DVD without changing the standard, therefore, a suggestion of an additional, rather than a whole new standard, but, to maintain the standard and provide as an add on or a simple expansion of the standard or additional information expansion, using an area of the DVD to store these URLs.

Further as suggested above this passage suggests to the examiner by not changing the standard to maintain backward compatibility by not changing the standard to expand to include and realize this new service.

By expanding and not recreation of the new standard but, merely expending is deemed to maintain backward compatibility, as well as the ability for older players which correspond to the original standard, to play the DVD with URLs, but, having no knowledge of the URL stored, it is deemed obvious if not inherent, that the DVD with URLs would be ignored, because the players prior to the DVD without URLs are not aware of this expansion of data, which is a simply expansion of the DVD standard.

Based on the analysis above, it would have been obvious to those skilled in the art with Kanazawa, Bugnion, Olsen and applicant's own disclosure, in front of themselves would have

rendered it obvious in view of a simple expansion of the DVD
standard without changing the standard and that the software if
not updated so that the software knows the existence of the
areas having the URLs on the DVD, such as other players which
are prior to a DVD with URLs, would have no knowledge of the
URLS, by maintaining the DVD standard without changing the
standard, renders it obvious that the stored area of the URLs
would be ignored, in view of no knowledge thereof and also no
direction of use, as IDENTFIED and taught by Olsen, as is deemed
obvious and deemed conventionally known, to those skilled in the
art.

further regarding the claims 2, 12, 21, 29, 38-41

o   *If the resource indication is present in the Text portion
of the media/DVD, scan by examining the sectors for resource
indications,*

o   *if not present, <u>laying dormant</u>, "Checking for resource
indications, the prior art applied is deemed to fail to address
as well as disclose or suggest this feature.*

It is noted that Kanazawa, teaches that that providing
resource indications of the DVD without changing the standard.

Therefore, a suggestion of an additional program or API or
module, rather than a whole new standard/operating program, but,
to maintain the standard and provide as an add on or a simple
expansion of the standard (suggest an API to modify the augment
the original software to play the DVD) or additional information
expansion, using an area of the DVD to store these URLs, which
storing URLs is text therefore, in a text field or area of the
medium.

*deCarmo teaches at col. 6, lines 35-, activating a thread
in response events, disc calls, reader system requirements
and/or interaction with the reader, or the threads lay dormant
and teaches about a Semaphore, events, related to events and
associated with an API.*

Also teaches at col. 3, lines 56-,

*"The system thread creates the counter thread when the
system thread detects that at least one of the counter*

parameters is being utilized by the system. The counter thread
has a semaphore and a queue associated with it and the counter
thread remains DORMANT until woke up by the semaphore."

At col. 3, lines 42-45, deCarmo further teaches the desire
to ensure efficient utilization of system thread/threads while
also maintaining the accuracy of the counter parameters in the
DVD system.

Further by leaving dormant a thread/API alleviates system
resources such as Ram, for other operations as is intuitive in
view of deCarmo.

Therefore, it would have been obvious to one skilled in the
art at the time of the invention to modify the combination as
applied by incorporating if and when the resource indication are
present in the Text portion of the media/DVD, scan by examining
the sectors for resource indications, if not present, laying
dormant, the operation of, checking for resource indications
with an extension of the DVD operating system such as an API,
thereby by only activating when needed, uses system resource
only when necessary, when not leave the program/API or thread,
dormant to allow the utilization of the system resource, such as
RAM etc.., normally taken up by the thread/program/API/Extension
Software, to be used for other software or applications, as is
deemed obvious to those skilled in the art.

Contact Information

Any inquiry concerning this communication or earlier
communications should be directed to the examiner of record
Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday-
Thursday between (7:30 AM to 5:00 PM).

If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Mohammad Ali, can be
reached on (571) 272-4105.

The fax phone number for the organization where this
application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system:

"http://portal.uspto.gov/external/portal/pair"

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vincent F. Boccio/
Primary Examiner, Art Unit 2169